# APPLICATION OF INTERIOR FINISH TO BASEMENT WALLS

by

C. R. Crooker



DIVISION OF BUILDING RESEARCH • NATIONAL RESEARCH COUNCIL • OTTAWA, CANADA



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Many houses, particularly those built in recent years, have large basements, and in many homes all or part of this space is used for recreational or other activities. In many cases, a satisfactory finish can be obtained by simply painting the interior surface of the wall with a water-cement paint. Where finishes other than paint films applied directly to the inside walls are used, attention must be given to the control of heat and moisture movement.

It is not a simple matter to provide moisture protection for a basement wall because the requirements at the top of the wall are different from those at the bottom. The portion of the basement wall above grade must meet the same requirements as any exterior wall exposed to the elements. The portion of the basement wall below grade, however, is subjected to very different conditions and the design of the wall must be changed.

In this area of the wall, moisture which comes from the damp earth must be considered. Where the wall is not covered, any moisture that may be present and moves to the interior surface of the basement wall is free to evaporate leaving no trace of its presence. If the wall below grade is covered, then moisture, if present, cannot evaporate easily and the wall becomes damp. Under these conditions, only the most durable of building materials can be expected to last.

The methods outlined below for finishing a basement wall take into consideration the heat and moisture flow of the whole wall. It is, frankly, a compromise since any system of finishing a wall that would meet all the requirements would necessitate more attention to details of construction than can be reasonably expected.

It is assumed that the wall to be finished is a dry wall. A wall which leaks during heavy rain or spring thaws should not be covered until repairs have been made.

The first step in finishing the wall is to provide a moisture barrier from grade level down to the floor. There are several methods of doing this. One is to apply a bituminous waterproofing such as an asphalt emulsion or cutback to the wall in such a manner as to provide a continuous membrane. Sheet material such as 2-mil polyethylene or 45- to 55-pound roll roofing may be used. These will stop the entry of any

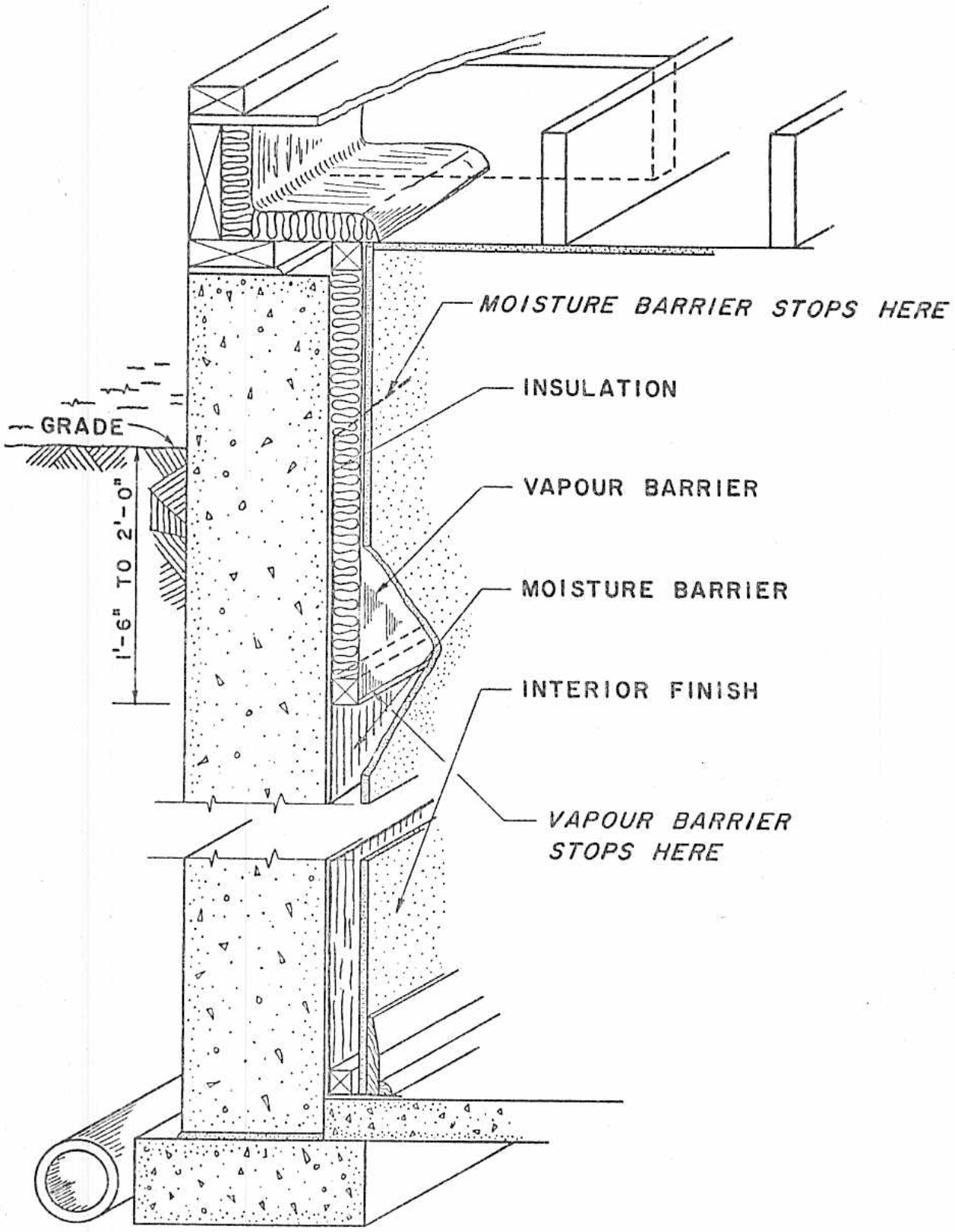
moisture into the framing members and at the same time resist deterioration under the moist conditions which occur at the bottom of the wall.

When the moisture barrier is in place, the next step is to apply the nailing strips that will support the interior finish. Vertical or horizontal strips may be used depending on the type of interior finish that is selected.

If insulation is to be used, it is applied to the upper part of the wall only, that is, from a point 1½ to 2 feet below grade up to the underside of the subfloor. There is no need for insulation on the bottom part of the wall since the heat loss through this portion is small.

The next step is to apply a vapour barrier to the upper portion of the wall. Where the upper portion is insulated, the vapour barrier backing on batt-type insulations may be used. Even if no insulation is used, a vapour barrier should be applied to prevent moisture passing into the wall and condensing on the cold concrete.

Where vertical nailing strips have been used, it is advisable to place horizontal strips between the verticals at the point where the vapour barrier starts, that is 1½ to 2 feet below grade. This will block off the air space and also provide backing for the bottom of the vapour barrier.

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